

# FACTS ABOUT CWD

## What is Chronic Wasting Disease?

Chronic Wasting Disease (CWD) belongs to a group of diseases known as transmissible spongiform encephalopathies (TSEs) which cause degeneration of the brain in cervids such as deer, elk and moose. CWD is always fatal to the infected animal, but can take months or years before symptoms of infection appear. Animals with signs of CWD show changes in natural behavior and can exhibit extreme weight loss, excessive salivation, stumbling and tremors.

## How is CWD spread?

CWD is transmitted through prions, which are abnormal proteins that attack the nervous systems of these species. These prions accumulate in the brain, spinal cord, eyes, spleen and lymph nodes of infected animals. CWD is spread by animal-to-animal contact or by animal contact with soil that contains prions from urine, feces or the decomposition of an infected animal. It can spread through activities such as feeding that unnaturally concentrates animals, the natural movement and dispersal of infected free-ranging deer, the transportation of live captive deer with CWD or the transportation and improper disposal of infected carcasses.

## How is CWD diagnosed?

CWD in deer can only be confirmed by laboratory tests of brain stem or lymph tissue from harvested animals.

## When was CWD first discovered?

CWD was first recognized in 1967 in captive mule deer in Colorado. Since then, CWD has been documented in free-ranging and captive white-tailed deer, as well as mule deer, elk and moose.

Missouri's first cases of CWD were detected in three captive white-tailed bucks at two private hunting preserves in Linn and Macon counties between February 2010 and December 2011. As of June 2012, eight additional cases of CWD have been found in captive white-tailed deer at the private Macon-County facility.

In response to the initial cases, MDC worked with hunters during the 2010 and 2011 firearms deer seasons to collect tissue samples from deer harvested in the area.



Two free-ranging adult bucks from Macon County tested positive for CWD in the fall of 2011. As of June 2012, three additional cases of CWD have been detected in free-ranging deer in the area.

## In what states has CWD been found?

CWD has been documented in a small number of both captive and free-ranging deer in north-central Missouri. It has also been found in Colorado, Illinois, Kansas, Maryland, Michigan, Minnesota, Montana Nebraska, New Mexico, New York, North Dakota, Oklahoma, South Dakota, Utah, Virginia, West Virginia, Wisconsin, Wyoming and the Canadian provinces of Alberta and Saskatchewan.

## What is MDC doing to protect the state against CWD?

With the help of hunters, MDC has tested more than 35,000 free-ranging deer for CWD from all parts of the state since 2002 with only five cases detected in Macon County as of June 2012. MDC is implementing several disease management actions to help limit the spread, prevalence and impact of the disease.

## Restriction on feeding

The Conservation Commission approved a regulation change in May 2012 that places a restriction on activities that are likely to unnaturally concentrate white-tailed deer and promote the spread of CWD. The ban on the placement of grain, salt products, minerals and other

consumable natural or manufactured products is limited to the CWD Containment Zone comprised of Adair, Chariton, Linn, Macon, Randolph, and Sullivan counties. The regulation becomes effective September 30, 2012.

The regulation includes exceptions for backyard feeding of birds and other wildlife within 100 feet of any residence or occupied building or if feed is placed in such a manner to reasonably exclude access by deer. The regulation also includes exceptions and normal agricultural, forest management, crop and wildlife food production practices. Farmers are encouraged to remove salt and minerals when cattle are not present to minimize use by deer.

The reason for the regulation change is that activities such as feeding and placement of minerals/salts that artificially concentrate deer greatly increase the likelihood of disease transmission from animal to animal or soil to animal.

### **Removal of antler-point restriction**

The Conservation Commission approved a regulation change in May 2012 for a special harvest provision that rescinds the antler-point restriction (four-point rule) in the CWD Containment Zone comprised of Adair, Chariton, Linn, Macon, Randolph, and Sullivan counties. The repeal of the antler-point restriction will be effective September 15, 2012, the opening of archery season.

The reason for the regulation change is that management strategies, such as antler-point restrictions, protect yearling males and promote older bucks. Yearling and adult male deer have been found to exhibit CWD at much higher rates than yearling and adult females, so a reduction in the number of male deer can help limit the spread of CWD. The dispersal of yearling males from their natal or birth range in search of territory and mates is also one of the primary means of expanding the distribution of CWD.

### **Don't remove carcasses from area**

MDC also encourages hunters who harvest deer within the CWD Containment Zone comprised of Adair, Chariton, Linn, Macon, Randolph, and Sullivan counties not to take whole deer carcasses or carcass parts out of the area where CWD has been found. Exceptions to this include:

- meat that is cut and wrapped,
- meat that has been boned out,
- quarters or other portions of meat with no part of the spinal column or head attached,
- hides or capes from which all excess tissue has been removed,
- antlers or antlers attached to skull plates or skulls cleaned of all muscle and brain tissue,
- upper canine teeth, and
- finished taxidermy products.

The reason for this recommendation is that CWD can be transmitted from the environment to deer through soil and water that contain infected waste and/or infected carcasses. Deer can be infected with CWD but have no visible signs or symptoms. Moving harvested deer that still have parts known to concentrate CWD (brain, spinal cord, eyes, spleen, and lymph nodes) from the area known to have CWD can introduce the disease to other parts of the state through the improper disposal of carcasses.

Hunters should make every attempt to avoid moving the head and spinal cord from the CWD-Containment Zone. It is important to properly dispose of potentially infected deer carcasses, including bones and trimmings, to minimize the risk of exposure to uninfected deer. Carcass disposal should be done in a manner that makes CWD-causing prions inaccessible to deer. Disposal of deer carcasses in a landfill is the preferred option. Double bag carcass parts and take them directly to a landfill, or place them in trash cans for pick-up. Burying carcass waste is another acceptable option. Carcass waste should be buried deep enough to prevent scavengers from digging it up. As a last resort, and only on their own land, hunters can put carcass waste back on the landscape. Carcasses should be put as close as possible to where the deer was harvested so as to not spread CWD-causing prions to new locations. If possible, put the carcass in a location where it will be inaccessible to scavengers and other deer.

### **Fall harvest CWD sampling**

MDC will also continue to work with hunters who harvest deer in the CWD Containment Zone comprised of Adair, Chariton, Linn, Macon, Randolph, and Sullivan counties to collect samples for CWD testing.



## Can people or livestock get CWD?

The Missouri Department of Agriculture states there is no evidence from existing research that CWD can spread to domestic livestock, such as sheep or cattle. The Missouri Department of Health and Senior Services (MDHSS) states there is no evidence that CWD can infect people.

The Chronic Wasting Disease Alliance recommends the following common-sense precautions when pursuing or handling deer or other cervids that may have been exposed to CWD:

- Do not handle or consume any animal that is acting abnormally or appears to be sick.
- Contact your state game and fish department if you see or harvest an animal that appears sick.
- Wear latex or rubber gloves when field dressing deer or other cervids.
- Bone out meat from the animal. Don't saw through bone and avoid cutting through brain or spinal cord (backbone).
- Minimize handling of brain and spinal tissues.
- Wash hands and instruments thoroughly after field dressing is completed.
- Avoid consuming brain, spinal cord (backbone), eyes, spleen, tonsils and lymph nodes of harvested animals. Normal field dressing coupled with boning-out a carcass will remove most, if not all, of these body parts. Cutting away all fatty tissue will remove remaining lymph nodes.
- Avoid consuming meat from any animal that tests positive for CWD.

## Can hunters get their deer tested for CWD?

A system for individual hunters to have harvested deer tested for CWD is not available in Missouri. As done in 2010 and 2011, MDC will work with individual hunters in the area where CWD has been found to test harvested deer for CWD.



## Can hunters bring harvested deer or other cervids to Missouri from other states?

According to the Missouri Wildlife Code, the importation, transportation, or possession of cervid (such as deer, elk, moose) carcasses or cervid carcass parts taken from or obtained outside of Missouri is prohibited, except the following:

- Meat that is cut and wrapped;
- Meat that has been boned out;
- Quarters or other portions of meat with no part of the spinal column or head attached;
- Hides or capes from which all excess tissue has been removed;
- Antlers;
- Antlers attached to skull plates or skulls cleaned of all muscle and brain tissue;
- Upper canine teeth; or
- Finished taxidermy products.

People may transport carcasses or parts of carcasses with the spinal column or head attached into Missouri only if they report the action to MDC by calling 877-853-5665 within 24 hours of entering the state. They must then take the carcasses or parts of carcasses to a licensed meat processor or taxidermist within 72 hours of entry. Licensed meat processors and taxidermists shall dispose of the discarded tissue in a properly permitted landfill.

## What can the public do to help?

People who observe or harvest sickly deer should contact their nearest MDC office or conservation agent. Hunters who harvest deer in the area where CWD has been found are encouraged to participate in MDC CWD sampling efforts in the area.

## For more information on CWD, contact:

**Missouri Department of Conservation**

573-751-4115

**Missouri Department of Agriculture  
Division of Animal Health**

573-751-3377

**Missouri Department of Health and Senior Services**

573-751-6113

## Public comments

We welcome email comments and suggestions on this issue at

**[mdc.mo.gov/node/17901](http://mdc.mo.gov/node/17901)**



